

When we started making truck tires,
most trucks had 2-horsepower engines.

Of course, cars only had 1-horsepower engines back then. But that didn't stop us from making America's first successful rubber carriage tire. The year was 1894.



America would soon develop another kind of horsepower, and cars and trucks would get bigger and faster and better. And so would Kelly-Springfield tires.

In fact, today we make more high-mileage after-market tires for cars, trucks, and tractors than anyone else in America.

But back in the 1890s, there was only horsepower. And tires made by Kelly-Springfield. We all had to start somewhere. And someone had to be first.

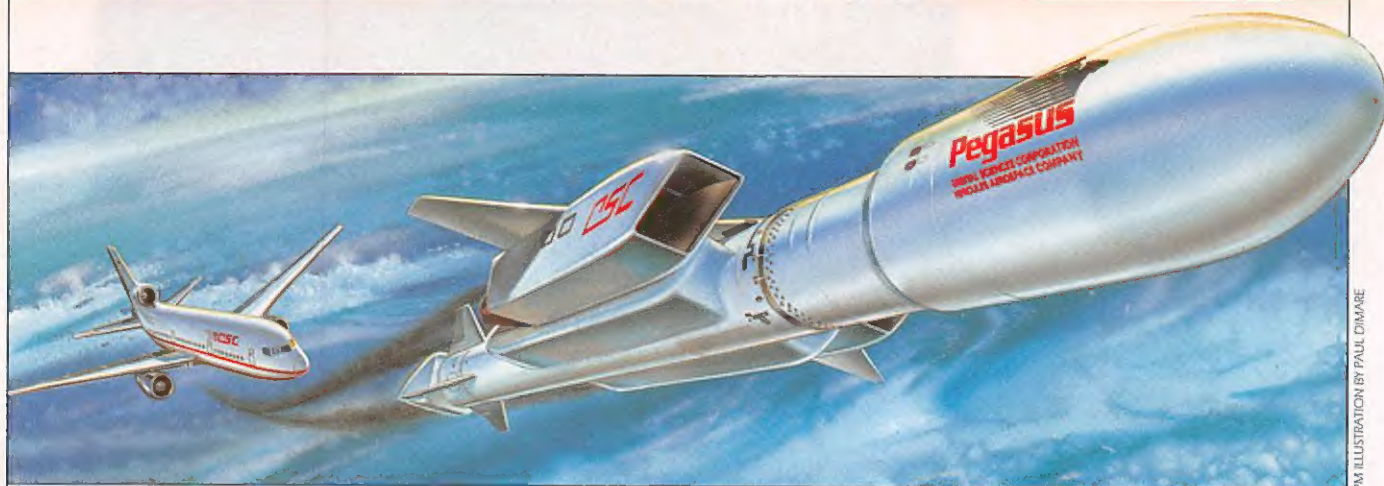
The Kelly-Springfield Tire Company



America's
Oldest
Tire Company

Quality since 1894.





PAUL DWORE

Jet-Packing Rocket

FAIRFAX, VA—*Pegasus*, the delta-winged rocket that launches from a high-flying aircraft, is about to get some extra horsepower. Engineers at Orbital Sciences Corp. are designing a *TurboPegasus* fea-

turing two drop-away jet engines.

The turbojets kick in as soon as the vehicle clears its mothership. *TurboPegasus* noses up at a 3.5° angle, and the air-breathing engines boost its speed

above Mach 4, its altitude to 90,000 ft.

There the jets and fuel-tank jettison, and the first rocket stage ignites. *TurboPegasus* then follows a classic S-shaped rocket trajectory to plant its payload in orbit.

The turbo configuration

Jet engines kick in as *TurboPegasus* begins 3.5° climb to 90,000 ft., lifted by its delta wing.

will more than double *Pegasus*'s lifting power—2250 pounds versus 1000 pounds for the stretched *Pegasus XL*. The first *TurboPegasus* could fly in 1995.

Collider's Supermole

WAXAHACHIE, TX—Now that the English Channel tunnel is completed, the world's premiere tunnel-boring project is the 54-mile racetrack course being carved out for the Superconducting Super Collider. Four huge mole machines are already chewing away soft rock 70 ft. below the surface.

Tunnelers decided to start off by tackling the worst geology—a tricky patch of shale through which the tunnel must pass. Because this rock crumbles when exposed to air, a tunnel-boring machine (TBM) must burrow as fast as possible, drilling away and lining its wake with pre-cast concrete sections before the shale deteriorates.

The job called for the Inchworm, a tunnel-boring machine custom-built by Robbins Corp. of Kent, Washington. The 250-ton machine is the first of its kind to operate continuously.



Typically the big moles lunge forward, propelled in part by elbowing off the sides of the tunnel with gripper shoes, then they stop while the shoes are repositioned. By contrast, the Inchworm has two sets of shoes, which can grip and release the tunnel walls in a computer-coordinated rhythm, enabling it to tear through 150 ft. a day.

Mighty Inchworm bores continuously through rock and leaves concrete-lined Super Collider tunnel in its wake.



SSC LABORATORY PHOTOS

Charge Up That Bike

LONDON, ENGLAND—From the fertile mind of Sir Clive Sinclair comes the Zike electric bicycle. The NiCad batteries boost your pedaling for up to 3 hours. If you let the rare-earth magnet motor do all the work, it's more like an hour. Top speed is 15 mph. Regenerative brakes recharge the batteries when you decelerate. The British are already Ziking. Americans will get a second-generation version.



ZINE BIKE CORP. PHOTO

Aluminum-plastic frame chops Zike's weight down to 26 pounds.